

Louisiana Occupational Employment Wage Survey

INTRODUCTION

The 2009 release of the “Louisiana Occupational Employment and Wage Survey” is a compilation of data collected from employers who voluntarily responded to our questionnaire during the period of May 2008, May and November 2007, May and November 2006, and November 2005 panels. Significant reductions in sampling errors are obtained by combining six panels of data, particularly for small geographic areas and occupations. The **Occupational Employment Statistics (OES)** program uses the **Bureau of Labor Statistics (BLS)** Employment Cost Index (ECI) to adjust survey data from prior panels before combining them with the current panel's data. For more information on the ECI, please visit their Web site at <http://www.bls.gov/ect>.

The **Occupational Employment Statistics** survey is designed to provide statistical data related to workforce issues such as:

- ❖ Analysis of current and historical occupational employment
- ❖ Vocational counseling and planning
- ❖ Analysis of competitive wages
- ❖ Development of occupational projections
- ❖ Economic development
- ❖ Industry skills and technology studies
- ❖ Educational and career training curricula
- ❖ Jobseekers
- ❖ Market analysis

In order to better meet local user needs, this release is organized for ease of comparison between state and **Regional Labor Market Areas (RLMAs)**. These estimates incorporate data from the OES survey and are generated utilizing BLS approved methodology. Data for the surveys were collected on different occupational structures and therefore are not directly compatible to the **Metropolitan Statistical Areas (MSAs)** data. OES data are available for 375 metropolitan statistical areas and 34 metropolitan divisions. To view national, state, RLMA, and MSA data online, please visit our Web site at www.LAWORKS.net or the OES Web site at <http://stats.bls.gov/oes>.

The Standard Occupational Classification System

The U.S. Office of Management and Budget’s new occupational classification system, the **Standard Occupational Classification (SOC)**, consist of over 820 detailed occupations. The SOC is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States. The OES survey uses 22 of the 23 major occupational groups from the SOC system to categorize workers who work for pay. Military occupations are excluded and are not covered in the OES survey. The major groups are as follows:

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11-0000	Management Occupations
13-0000	Business & Financial Operations Occupations
15-0000	Computer & Mathematical Occupations
17-0000	Architecture & Engineering Occupations
19-0000	Life, Physical, & Social Science Occupations
21-0000	Community & Social Services Occupations
23-0000	Legal Occupations
25-0000	Education, Training, & Library Occupations
27-0000	Arts, Design, Entertainment, Sports, & Media Occupations
29-0000	Healthcare Practitioners & Technical Occupations
31-0000	Healthcare Support Occupations
33-0000	Protective Service Occupations
35-0000	Food Preparation & Serving Related Occupations
37-0000	Building & Grounds Cleaning, & Maintenance Occupations
39-0000	Personal Care & Service Occupations
41-0000	Sales & Related Occupations
43-0000	Office & Administrative Support Occupations
45-0000	Farming, Fishing, & Forestry Occupations
47-0000	Construction & Extraction Occupations
49-0000	Installation, Maintenance, & Repair Occupations
51-0000	Production Occupations
53-0000	Transportation & Material Moving Occupations

For further information on SOC, visit the Web site at <http://www.bls.gov/soc>.

The Industry Coding System

The OES survey includes establishments in **North American Industry Classification System (NAICS)** sector 11 (logging and agricultural support activities only), 21-23, 31-33, 42, 44-45, 48-49, 51-56, 61-62, 71-72, 81 (except private households), and state and local government. The executive branch of the federal government and the U.S. Postal Service also are included. The OES survey covers all full and part-time wage and salary workers in nonfarm industries. For more information about NAICS, visit the Web site at <http://www.bls.gov/bls/naics.htm>.

OES Design and Methodology

Beginning in November 2002, the OES program moved from an annual to a semiannual collection method using the reference months of May and November of each year. The OES program is a federal-state cooperative program between the **Bureau of Labor Statistics (BLS)** and individual **State Employment Security Agencies (SESA)**, which is the **Louisiana Workforce Commission (LWC)**. The collection of data on wage and salary workers in nonfarm establishments produced estimates in over 400 industry classifications. The OES survey has been designed to produce estimates at a desired level of precision using the full three years, or six panels of data. The employment levels are benchmarked to the November 2007 - May 2008 average employment; however, wages are calculated using the March 2009 Employment Cost Index (ECI). The BLS produces the survey materials, selects the establishments to be surveyed, and provides technical support; while the states collect the majority of the data, verify the quality, and publish the information. BLS and the **Employment and Training Administration (ETA)** provide funding for the survey.

Technical Notes

Reliability: All published wage data have a relative standard error of 50 percent or less. The relative standard error reflects the magnitude of sampling error. Sampling errors occur because observations are made on a sample, not on the entire population. There are two types of errors that affect the accuracy of the occupational estimates - sampling and nonsampling errors.

Sampling errors result from the differences that occur by chance because a sample, rather than the whole population, was surveyed. The relative error expresses the standard error of an estimate as a percentage of that estimate and creates an interval around the estimate. The total estimated employment multiplied by the relative error gives a figure which can be added to and subtracted from the estimate, to obtain an upper and lower limit or interval. A level of confidence is then associated with this interval. An interval that is based on one relative error has a 68 percent level of confidence, and one based on two relative errors has a level of 95 percent. For example, suppose an estimated employment of 500 and a relative error of ten percent is given for an occupation. This means that with a 68 percent confidence level, the true number of workers in that occupation would fall between 450 and 550.

Nonsampling errors result from a wide range of problems that may occur apart from the chance effects of using a sample. This type of error can be attributed to many sources such as survey nonresponse, definitional problems, or processing errors. The possible effect of nonsampling error is difficult to measure.

Confidentiality guidelines are strictly observed and are intended to preserve the anonymity of firms that participate in the survey. Data for a particular occupation are suppressed (not shown in this report) when:

- ❖ fewer than three firms responded for an occupation in a particular industry
- ❖ any one firm represents more than 50 percent of the employment in an occupation
- ❖ two firms combined represent more than 75 percent of the employment in an occupation

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Workers Included are: workers who can be classified as full-time or part-time employees, on paid vacations or other types of leave, unpaid or short-term absences, salaried officers, executives, staff members of incorporated firms, employees temporarily assigned to other units, employees for whom the reporting unit is their permanent duty station regardless of whether that unit prepares their paycheck

Workers Excluded are: the self-employed, owners/partners of unincorporated firms, unpaid family workers

The **employment estimate** is calculated on those occupations reported on the survey forms from respondents. The lists of possible occupations are industry-specific and not all detailed occupations appear on all survey forms. Each detailed occupation is part of a larger group of occupations. When an occupation's industry-specific employment estimates are summed to produce cross-industry employment estimates, only those industry-specific estimates from industries where the occupation appeared on the survey form are included in the summation.

There is a possibility that a particular occupation could exist in an industry where it was unexpected and, therefore, not surveyed. In that case, it would not be included in the calculation of that occupation's employment and wage estimate. However, it is included in the relevant "all other" category.

Wages for the OES survey are straight-time gross pay, exclusive of premium pay.

Included are:

- ❖ base rate; cost-of-living allowances; guaranteed pay; hazard pay; incentive pay including commissions; tips; production bonuses; piece rate; portal-to-portal rate; longevity pay; deadheading pay; and on-call pay.

Excluded are:

- ❖ attendance bonuses; back pay; draw; holiday premium pay; jury duty pay; lodging and meal payments; merchandise discounts; overtime pay; severance pay; shift differentials; non-production bonuses; stock bonuses; tool allowance; tuition reimbursements; holiday premium pay; uniform allowance; and vacation and weekend pay.

Imputation: Some survey participants were unable or unwilling to provide wage information for their workers. In order to include the data from these reporters, the missing wage data are imputed. For most occupations with imputed wages, the imputation is based on data from wage reporting employers that are similar in size and industry to the non-wage reporting employer.

Data Analysis

Using the BLS methodology, four measures of hourly wage estimates: the mean wage and three percentile measures.

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Mean (average wage) is the estimated total wages for an occupation divided by its weighted survey employment. The mean wage value for the upper open-ended wage interval is its lower bound (**Winsorized mean**). These interval mean wage values are then attributed to all workers reported in the interval. For each occupation, total weighted wages in each interval are summed across all intervals and divided by the occupation’s weighted survey employment.

Percentile Measures:

- ❖ **25th Percentile (low):** A quarter of the workers in the occupation earn an equal or smaller wage.
- ❖ **50th percentile (Median):** 50 percent of workers in an occupation earn wages below, or above, the median wage.
- ❖ **75th percentile (high):** Three-quarters of the workers earn less than or equal to the 75th percentile.

Annual wage estimates are calculated by multiplying the mean wage by a “year-round, full-time” figure of 2,080 hours per year. However, most employees are paid an hourly rate by their employers and may work more or less than 40 hours per week. Most education professionals do not work 12 months of the year, their wage data may not have been reported in a manner consistent with the assumption of a fixed work schedule. For this reason, only the annual salary is calculated for occupations that typically have a work-year of less than 2,080 hours, including flight pilots and attendants, legislators, and teachers. Entertainment occupations such as actors, dancers, musicians and singers, entertainers/performers and all other sports related workers will be reported at the hourly rates only. There is wide variation in the number of hours worked by those employed as actors, dancers, musicians, and singers. Many jobs are for a duration of one day or one week and it is extremely rare for a performer to have guaranteed employment for a period that exceeds three to six months. However, hourly and annual estimates are provided for producers and directors, music directors and composers.

Hourly wage estimates do not reflect the actual wages of employees; instead the numbers of workers are reported in each of the twelve wage ranges as listed below.

INTERVAL	HOURLY	ANNUAL
Range A	Under \$7.50	Under \$15,600
Range B	\$7.50 to \$9.49	\$15,600 to \$19,759
Range C	\$9.50 to \$11.99	19,760 to \$24,959
Range D	\$12.00 to \$15.24	\$24,960 to \$31,719
Range E	\$15.25 to \$19.24	\$31,720 to \$40,039
Range F	\$19.25 to \$24.49	\$40,040 to \$50,959
Range G	\$24.50 to \$30.99	\$50,960 to \$64,479
Range H	\$31.00 to \$39.24	\$64,480 to \$81,639
Range I	\$39.25 to \$49.74	\$81,640 to \$103,479
Range J	\$49.75 to \$63.24	\$103,480 to \$131,559
Range K	\$63.25 to \$79.99	\$131,560 to \$166,399
Range L	\$80.00 and over	\$166,400 and over

OES Substate Areas: Reported data are processed separately to produce estimates for statewide Louisiana and for substate areas designated as RLMAs. This causes the estimates to differ for some occupations. Area tables do not contain all of the occupations listed in the statewide tables because the occupation was either confidential or not reported for that particular area.